

AMENDMENTS TO THE CLAIMS

The following Listing of the Claims replaces all prior claims in the application.

Claims 1 -6 (Canceled).

Claim 7 (Currently Amended). A method for identifying substances that modulate the nuclear translocation of an armadillo protein, comprising:

(a) providing a culture of cells that express said armadillo protein and a mutant presenilin protein, or a functional fragment thereof, wherein the mutant presenilin protein, or functional fragment thereof ~~that~~ binds said armadillo protein;

(b) contacting said culture with a test substance;

(c) inducing nuclear translocation of said armadillo protein in said cells; and

(d) measuring levels of nuclear armadillo protein as compared to a control as an indication of modulatory activity of said test substance.

Claim 8 (Original). The method of claim 7, wherein said armadillo protein is β -catenin.

Claim 9 (Original). The method of claim 7, wherein said armadillo protein is hNPRAP.

Claim 10 (Original). The method of claim 7, wherein said armadillo protein is p0071.

Claim 11 (Original). The method of claim 7, wherein (c) comprises culturing said cells in the presence of a lithium salt.

Claim 12 (Currently Amended). The method of claim 7, wherein said mutant presenilin protein comprises amino acid residues from about 260 to about 409 of a mutant PS1 protein, wherein the amino acid positions correspond to the wild-type human PS1 sequence defined by SEQ ID NO:1.

Claim 13 (Currently Amended). The method of claim 7, wherein said mutant presenilin protein comprises amino acid residues from about 372 to about 399 of a mutant PS1 protein, wherein the amino acid positions correspond to the wild-type human PS1 sequence defined by SEQ ID NO:1.

Claim 14 (Currently Amended). The method of claim 7, wherein said mutant presenilin protein comprises amino acid residues from about 266 to about 390 of a mutant PS2 protein, wherein the amino acid positions correspond to the wild-type human PS2 sequence defined by SEQ ID NO:2.

Claim 15 (Currently Amended). The method of claim 7, wherein said mutant presenilin protein comprises amino acid residues from about 350 to about 380 of a mutant PS2 protein, wherein the amino acid positions correspond to the wild-type human PS2 sequence defined by SEQ ID NO:2.

Claim 16 (Original). The method of claim 7, wherein said cells are selected from the group consisting of fibroblasts, leukocytes, neuronal cells, human embryonic kidney cells and *D. melanogaster* cells.

Claim 17 (Original). The method of claim 7, wherein said control comprises cells expressing a wild-type presenilin and said armadillo protein.

Claim 18. (Withdrawn) A method for screening individuals for presenilin alleles associated with Alzheimer's Disease or related disorders, comprising:

(a) obtaining cells from an individual to be tested for Alzheimer's Disease or a related disorder;

(b) inducing nuclear translocation of an armadillo protein in said cells; and

(c) measuring levels of said nuclear armadillo protein as compared to a control as an indication of the presence or absence of presenilin alleles associated with Alzheimer's Disease or a related disorder.

Claim 19. (Withdrawn) The method of claim 18, wherein (b) comprises culturing said cells in the presence of a lithium salt.

Claim 20. (Withdrawn) The method of claim 18, wherein said control comprises cells that express normal presenilin and said armadillo protein.

Claim 21. (Withdrawn) The method of claim 18, wherein said armadillo protein is β -catenin.

Claim 22. (Withdrawn) The method of claim 18, wherein said armadillo protein is hNPRAP.

Claim 23. (Withdrawn) The method of claim 18, wherein said armadillo protein is p0071.